October 2001

## Pro Bowl 50-yard line familiar territory to AFRL engineer

## by Jill Bohn, AFRL Public Affairs

WRIGHT-PATTERSON AFB, Ohio — Work and pleasure come together in the form of a Hawaiian vacation for AFRL's Barb Frantom who uses her engineering background and love of dance to choreograph a NFL Pro Bowl half-time performance.

A 15-year employee of the Information Directorate, Frantom's main job duty is to write software for advanced integrated avionics processing systems, and to test those systems in a simulation laboratory. For example, if a new digital graphics system has been developed for an aircraft, her job is to write the software that feeds information such as navigation, airspeed, altitude, and provides controlling commands to the new system.

Frantom graduated from Wright State University, which allowed her to study engineering and pursue a long-time interest in dancing. She was a member of the Emerald Jazz dance team as a student there.

Straight out of college she started her job at Wright-Patterson Air Force Base and began coaching drill team at a few of the area's high schools. She landed a spot on the dance team for the Dayton Wings semi-professional basketball team, where, ironically, she made a connection that will forever change the way that she looks at a football field.

The parents of one of the girls on the Wings dance squad own All-American Cheer and Dance (AADC) and they asked Frantom to perform at special events. Based out of Hilliard, Ohio, AADC encourages athletic and artistic ability by awarding scholarships to cheerleaders and dancers.

Fast-forward through the years and Frantom's earlier connection places her on the executive staff of AACD. She recruits dancers from all across the U.S. at various competitions for the opportunity to participate in the half-time performance of the Pro Bowl in Honolulu, Hawaii. In all, 411 dancers are selected to attend.

Once in Hawaii, Frantom's job is to teach field formation and prop usage for the predetermined half-time theme. She uses her knowledge as an engineer to transform the football field into a large-scale graph.

"A football field has certain distances which enable you to lay out an entire show. It's all a big mathematical problem – how long it takes and what you can do in certain counts," she explains. "My background and experience allow me to know how many counts it takes to get from here to there."



According to Frantom, she spends about three hours in her room, color coordinating the show and dividing it among the groups. She says the system makes it easy for the kids and helps them get the program more quickly, allowing for more time on the beach.

"We practice probably about 10 times in two to three hours blocks during the course of the week leading up to the show," Frantom said.

In addition to the Hawaiian trip, Frantom's reward is the positive environment created for the kids. Every year AACD awards over \$50,000 in scholarships to help with educational costs. She recalls that they have had dancers go on to perform with the Rockettes, work as a dance captain for River Dance, and make the University of Kentucky cheerleading squad.

In addition to her full-time job and work with AADC, Frantom is a wife, new mother, and the drill team coach at Wayne High School. As the Warriorette's coach, she choreographs a different half-time show for each home game.

"As soon as we go to Hawaii at the end of January, I like everything to be done," Frantom said with never-ending dedication. "Then when I come back I should have a couple of months off before drill team tryouts start again." (a)